

WHAT IS CLAIMED IS:

1. An automatic authentication method in a print process that requires user authentication, comprising the steps of:

5 extracting information related to an application and/or a document for the print process as attribute information; and

executing user authentication based on the attribute information.

10 2. The method according to claim 1, wherein the attribute information contains various kinds of document attribute information including at least one of a document name, application name, document creator/updater, affiliation of the document creator/updater, password, create/update date, which are associated with a document print process.

15 3. The method according to claim 1, further comprising the step of executing, when user authentication has succeeded and a print process is executed, an accounting process of expendables associated with the document print process for each user or each department of a group to which the user belongs.

20 4. The method according to claim 1, wherein the attribute information contains various kinds of application attribute information including at least one of an application name, application user,

affiliation of the application user, password, use date, which are associated with the application used.

5. The method according to claim 1, further comprising the step of executing, when user

5 authentication has succeeded and a print process is executed, an accounting process associated with use of the application for each user or each department of a group to which the user belongs.

6. The method according to claim 1, wherein user

10 authentication is executed by comparing an ID and password found based on the attribute information, and an ID and password that a user inputs to a printer.

7. An automatic authentication system in a print process that requires user authentication, comprising:

15 means of extracting information related to an application and/or a document for the print process as attribute information; and

means of executing user authentication based on the attribute information.

20 8. The system according to claim 7, wherein the attribute information contains various kinds of document attribute information including at least one of a document name, application name, document creator/updater, affiliation of the document

25 creator/updater, password, create/update date, which are associated with a document print process.

9. The system according to claim 7, wherein said automatic authentication system comprises a client computer or print server which is installed with a printer driver, a server for managing a network, and a 5 printer for executing the print process, which are connected via a network, and

 said extraction means is included in the printer driver, and said user authentication means is included in the server.

10 10. The system according to claim 7, further comprising means of, when user authentication has succeeded and a print process is executed, executing an accounting process of expendables associated with the document print process for each user or each department 15 of a group to which the user belongs.

11. The system according to claim 7, wherein the attribute information contains various kinds of application attribute information including at least one of an application name, application user, 20 affiliation of the application user, password, use date, which are associated with the application used.

12. The system according to claim 7, further comprising means of, when user authentication has succeeded and a print process is executed, executing an 25 accounting process associated with use of the application for each user or each department of a group to which the user belongs.

13. The system according to claim 7, wherein said
automatic authentication system comprises a client
computer or print server which is installed with a
printer driver, and a printer for executing the print
5 process, which are connected via a network, and

 said extraction means is included in the printer
driver, and said user authentication means is included
in the printer.

14. The system according to claim 7, wherein said
10 user authentication means compares an ID and password
found based on the attribute information, and an ID and
password that a user inputs to a printer.

15. A printer driver in an automatic authentication
system which executes a print process that requires
15 user authentication, comprising:

 means of receiving information related to an
application and/or a document for the print process as
attribute information;

 means of extracting information required for user
20 authentication from the attribute information;

 means of sending a user authentication request
appended with the extracted information to a server via
a network; and

 means of, when user authentication has succeeded,
25 controlling a printer to execute the print process.

16. A printer driver in an automatic authentication system which executes a print process that requires user authentication, comprising:

means of receiving information related to an application and/or a document for the print process as attribute information;

means of extracting information required for user authentication from the attribute information; and

means of sending print information appended with the extracted information to a printer.

17. A server in an automatic authentication system which executes a print process that requires user authentication, comprising:

means of receiving information, which is required for user authentication and is extracted from attribute information related to an application and/or a document for the print process, from a printer driver via a network;

means of checking a user authentication result by comparing the extracted information with user authentication information which is registered in advance; and

means of returning the user authentication result to the printer driver via the network.

25 18. The server according to claim 17, wherein the user authentication information which is registered in

advance contains related information of a user and a department of a group to which the user belongs, and

5 said server further comprises means of, when user authentication has succeeded and a print process is executed, executing an accounting process of expendables associated with the document print process for each user or each department of the group to which the user belongs.

19. The server according to claim 17, wherein the user authentication information which is registered in advance contains related information of a user and a department of a group to which the user belongs, and

10 said server further comprises means of, when user authentication has succeeded and a print process is executed, executing an accounting process associated with use of the application for each user or each department of the group to which the user belongs.

15 20. The server according to claim 17, further comprising:

20 means of registering and holding various kinds of attribute information of departments, affiliations, individuals, print accounting states, associated with clients, users, and groups who make a document print process; and

25 means of updating use states of a printer used in a print process for respective departments, affiliations, and individuals.

21. The server according to claim 20, wherein the attribute information contains various kinds of document attribute information including at least one of a document name, application name, document creator/updater, affiliation of the document creator/updater, password, create/update date, which are sent from a print server or client and are associated with a document print process, and said checking means comprises means of executing department authentication of a user, group, affiliation, or the like by comparing a document creator/updater, affiliation of the document creator/updater, and password registered in said server on the basis of the various kinds of document attribute information.

10 22. The server according to claim 17, wherein the attribute information contains various kinds of application attribute information including at least one of an application name, application user, affiliation of the application user, password, use date, which are associated with the application used, and said checking means comprises means of granting permission of use of the application on the basis of the application attribute information.

15 23. A printer in an automatic authentication system which executes a print process that requires user authentication, comprising:

means of receiving information, which is required for user authentication and is extracted from attribute information related to an application and/or a document for the print process, from a printer driver together with print information;

means of inputting user authentication information; and

means of executing user authentication on the basis of a comparison result of the information required for user authentication and the input information.

24. A storage medium which computer-readably stores a printer driver in an automatic authentication system which executes a print process that requires user authentication,

said printer driver comprising the steps of:

receiving information related to an application and/or a document for the print process as attribute information;

20 extracting information required for user authentication from the attribute information;

sending a user authentication request appended with the extracted information to a server via a network; and

25 controlling, when user authentication has succeeded, a printer to execute the print process.

25. A storage medium which computer-readably stores a printer driver in an automatic authentication system which executes a print process that requires user authentication,

5 said printer driver comprising the steps of:
 receiving information related to an application and/or a document for the print process as attribute information;

10 extracting information required for user authentication from the attribute information; and
 sending print information appended with the extracted information to a printer.

26. A storage medium which computer-readably stores a control program for controlling a printer in an automatic authentication system which executes a print process that requires user authentication,

15 said control program comprising the steps of:
 receiving information, which is required for user authentication and is extracted from attribute information related to an application and/or a document for the print process, from a printer driver together with print information;

20 inputting user authentication information; and
 executing user authentication on the basis of a comparison result of the information required for user authentication and the input information.

27. An information processing apparatus connecting with an external information processing apparatus performing a user authentication for a print process, comprising:

5 extracting means of extracting information related to an application and/or a document for the print process as attribute information; and
 output means of outputting the attribute information extracted by said extracting means to said
10 external information processing apparatus using the attribute information for a user authentication for the print process.

28. The apparatus according to claim 27, wherein said attribute information contains various kind of document
15 attribute information including at least one of a document name, document creator, application of the document creator, create date which are associated with a document print process.

29. The apparatus according to claim 27, wherein said
20 attribute information contains an application name indicating an application to be used.

30. The apparatus according to claim 27, wherein said extracting means extracts the attribute information by calling a printer driver module and API provided
25 between OS and the printer driver module and causing OS to operate a document in said apparatus.

31. The apparatus according to claim 30, wherein said API is provided in the printer driver module.

32. The apparatus according to claim 30, wherein said extracting means calls said API in response to a print
5 instructor inputted from the application.